



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: David B. Olsen, et al.

Serial No. 10/520,925

Filed: January 7, 2005

For: THIONUCLEOSIDE DERIVATIVES AS INHIBITORS OF  
RNA-DEPENDENT RNA VIRAL POLYMERASEArt Unit: To Be AssignedExaminer: To Be AssignedCommissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR 1.97

Sir:

1. In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).

2. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

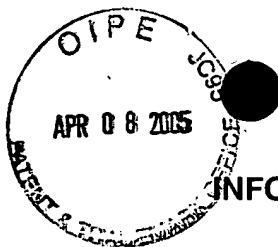
3. Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.

4. Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

MERCK &amp; CO., INC.

By Devin K. Moore Date 4-6-2005



# INFORMATION DISCLOSURE STATEMENT

5. Pursuant to 37 C.F.R. 1.98(d), copies of references listed on the attached form that were submitted to or cited by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

RELATED APPLICATION		
U. S. SERIAL NUMBER	FILING DATE	MERCK CASE
10/517,294	December 7, 2004	21124YP

If this is inconvenient, additional copies will be submitted upon request.

6. In accordance with 37 C.F.R. 1.97, (check one)

- ☒ the attached information is filed within three months of the filing date of the captioned case.
- ☐ the attached information is filed more than three months after the filing date but prior to the mailing of a first Office Action on the merits.
- ☐ the attached information is being filed more than three months after the filing date and after the mailing of a first Office Action on the merits, but before the mailing date of a Final Action or Notice of Allowance. The enclosed authorization is therefore given to charge Deposit Account No. 13-2755 for the fee required under 37 C.F.R. 1.17(p).
- ☐ the undersigned certifies that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.
- ☐ the undersigned certifies that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated under 37 C.F.R. 1.56(c) more than three months prior to the filing of this Statement.

Respectfully submitted,

By: Philippe L. Durette

Attorney \_\_\_\_\_ For Applicant(s)

Reg. No. 35,125

MERCK & CO., INC.

Patent Dept., RY60-30

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Date: April 6, 2005

## COMPLETELY KNOWN

<b>Application Number</b>	10/520, [REDACTED]
<b>Filing Date</b>	January 7, 2004
<b>First Named Inventor</b>	David B. Olsen, et al.
<b>Group Art Unit</b>	
<b>Examiner Name</b>	

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Sheet

1

of

3

Attorney Docket Number 21194P

[illegible]

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office	Number	Kind Code (if known)		
	10	PCT	WO02/057425		Merck & Co., Inc.	07/25/2002
	11	PCT	WO02/32920		Pharmasset Limited	04/25/2002
	12	PCT	WO03/093290		Genelabs Technologies, Inc.	11/13/2003
	13	PCT	WO02/057287		Merck & Co., Inc.	07/25/2002
	14	PCT	WO01/92282		Novirio Pharmaceuticals Limited	12/06/2001
	15	PCT	WO01/90121		Novirio Pharmaceuticals Limited	11/29/2001
	16	PCT	WO03/051899		Ribapharm Inc.	06/26/2003
	17	PCT	WO03/062255		Ribapharm Inc.	07/31/2003
	18	PCT	WO03/062256		Ribapharm Inc.	07/31/2003
	19	PCT	WO2004/065398		Ribapharm Inc.	08/05/2004

Examiner  
Signature

Date  
Considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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# STATEMENT BY APPLICANT

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2

of

3

**COMPLETE IF KNOWN****Application Number**

10/52

**Filing Date**

January 7, 2005

**First Named Inventor**

David B. Olsen, et al.

## Group Art Unit

Examiner Name

Attorney Docket Number

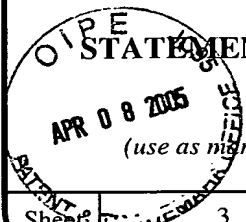
21194P

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Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office	Number	Kind Code (if known)		
	20	PCT	WO2004/028481		Genelabs Technologies, Inc.	04/08/2004
	21	PCT	WO2004/002999		Idenix (Cayman) Limited	01/08/2004
	22	PCT	WO2004/002422		Idenix (Cayman) Limited	01/08/2004
	23	PCT	WO2004/046331		Idenix (Cayman) Limited	06/03/2004
	24	PCT	WO2003/068244		Merck & Co., Inc./ Isis Pharm	08/21/2003
	25	PCT	WO2003/105770		Merck & Co., Inc./ Isis Pharm.	12/24/2003
	26	PCT	WO2004/007512		Merck & Co., Inc./ Isis Pharm	01/22/2004
	27	PCT	WO2004/009020		Merck & Co., Inc./ Isis Pharm	01/29/2004
	28	PCT	WO2004/072090		Merck & Co., Inc.	08/26/2004
	29	PCT	WO2004/000858		Merck & Co., Inc./ Isis Pharm	12/31/2003

Date  
Considered

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Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>COMPLETE IF KNOWN</b>	
Application Number		10/520	
Filing Date		January 7, 2004	
First Named Inventor		David B. Olsen, et al.	
Group Art Unit			
Examiner Name			
Sheet	3	of	3
Attorney Docket Number		21194P	

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	30	Anne B. Eldrup et al., "Structure-Activity Relationship of Heterobase-Modified 2'-C-Methyl Ribonucleosides as Inhibitors of Hepatitis C Virus RNA Replication", J. Med. Chem., Vol. 47, pp. 5284-5297 (2004)
	31	Anne B. Eldrup et al., "Structure-Activity Relationship of Purine Ribonucleosides for Inhibition of Hepatitis C Virus RNA-Dependent RNA Polymerase", J. Med. Chem., Vol. 47, pp. 2283-2295 (2004)
	32	David B. Olsen et al., "A 7-Deaza-Adenosine Analog is a Potent and Selective Inhibitor of Hepatitis C Virus Replication with Excellent Pharmacokinetic Properties", Antimicrobial Agents and Chemotherapy, Vol. 48, No. 10, pp. 3944-3953 (2004 )
	33	Per Hoffmann et. al., "Recent Patents on Experimental Therapy for Hepatitis C Virus Infection", Expert Opin. Ther. Patents, Vol. 13(11), pp. 1707-1723, (2003)
	34	Volker Brass et al., "Recent Developments in Target Identification against Hepatitis C Virus", Expert Opin. Ther. Targets, Vol. 8(4), pp. 295-307, (2004)
	35	Murai et al., "A synthesis and an x-ray analysis of 2'-C-,3'-C- and 5'-C-Methylsangivamycins", Heterocycles, vol. 33, pages 391-404 (1992)
	36	Iimori et al, "A Study on conformationally restricted sangivamycins and their inhibitory abilities of protein kinases", Nucleic Acids Symposium Series, vol, 27, pages 169-170 (1993); Chemical Abstracts, vol. 118, Abstract No. 160564 (1993)

Examiner Signature		Date Considered	
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